VBrickEtherneTV

VBrick
ETV Network Video Recorder

EtherneTV v4.2.1 NVR
Release Notes

VBrick

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About VBrick Systems

Founded in 1997, VBrick Systems, an ISO 9001 certified vendor, is a privately held company that has enjoyed rapid growth by helping our customers successfully introduce mission critical video applications across their enterprise networks. Since our founding, VBrick has been setting the standard for quality, performance and innovation in the delivery of live and stored video over IP networks—LANs, WANs and the Internet. With thousands of video appliances installed world-wide, VBrick is the recognized leader in reliable, high-performance, easy-to-use networked video solutions.

VBrick is an active participant in the development of industry standards and continues to play an influential role in the Internet Streaming Media Alliance (ISMA), the MPEG Industry Forum, and Internet2. In 1998 VBrick invented and shipped the world's first MPEG Video Network Appliance designed to provide affordable DVD-quality video across the network. Since then, VBrick's video solutions have grown to include Video on Demand, Management, Security and Access Control, Scheduling, and Rich Media Integration. VBrick solutions are successfully supporting a broad variety of applications including distance learning and training, conferencing and remote office communications, security, process monitoring, traffic monitoring, business and news feeds to the desktop, webcasting, corporate communications, collaboration, command and control, and telemedicine. VBrick serves customers in education, government, healthcare, and financial services markets among others.

NVR v4.2 Release Notes

The Network Video Recorder (NVR) is a component of VBrick's Media Control Server Suite and provides a dedicated platform to perform multiple simultaneous recordings of live streams coming from VBrick encoders. The NVR lets you off-load all recording tasks from the ETV Portal Server machine to one or more separate "recorder server" machines. The NVR is available in two versions—one that supports 10 simultaneous records and one that supports 40—and is ideal for environments that require large scale recording on a robust and reliable platform. The NVR is tightly integrated with the Portal Server, the Scheduler, and VBrick's Video-on-Demand servers. See the *ETV Portal Server Administrator Guide* for related information.

Topics in this document

Installing an NVR

The NVR is sold as a hardware/software combination or as software-only product. If you purchased the hardware/software combination from VBrick, the Standard or Standalone NVR software will be pre-installed and your server license(s) will be activated. You will still need to configure the NVR as explained in the *Portal Server Admin Guide*.

If you purchased only the software from VBrick, *you* must install the NVR software as explained below and then configure it using the instructions in the *Admin Guide*. If you are using server hardware not purchased from VBrick, be sure to read <u>NVR Hardware Recommendations</u> on page 2.

Installing a Standard NVR

▼   To install a standard NVR:

1. Go to the "Network Video Recorder" page on the Product CD and double-click on the **Standard NVR** setup file.
2. Follow the prompts and exit the window when done.
3. Then open the Portal Server Admin Console and configure the NVR: see "Configuring a Standard NVR" in the *Portal Server Admin Guide*.

Installing a Standalone NVR

▼   To install a standalone NVR:

1. Go to the "Network Video Recorder" page on the Product CD and double-click on the **Standalone NVR** setup file.

2. The installation steps are identical to those used to install the Portal Server. See "Installing the Portal Server" in the *Portal Server Release Notes* for complete details.

3. Follow the prompts and exit the window when done.

4. Then open the Standalone NVR Portal Server Admin Console and configure the NVR: see "Configuring a Standalone NVR" in the *Portal Server Admin Guide*.

Configuring an NVR

See "NVR Configuration" in the *Portal Server Admin Guide* for complete configuration instructions.

NVR Hardware Recommendations

If your server hardware was not purchased from VBrick, it must meet the following minimum specifications. The following tables show the recommended hardware and hard drive configuration relative to the number of purchased licenses. VBrick requires that you use dedicated server that meets or exceeds these specifications. The use of a less capable system may adversely affect system performance.

Table 1. Recommended Hardware Specifications

	NVR – 10 Record Licenses	**NVR – 40 Record Licenses**
Platform	Dell PowerEdge 2950	Dell PowerEdge 2950
Processor	Dual Core Xeon Processor 5130, 4MB Cache, 2.00GHz, 1333MHz FSB	(2) Dual Core Xeon Processor 5130, 4MB Cache, 2.00GHz, 1333MHz FSB
Memory	1 GB 533 MHz	2 GB 533 MHz
Storage capacity	(2) 73 GB OS drives (4) 146 GB content drives	(2) 146 GB OS drives (4) 300 GB content drives
RAID Type	2 drive RAID1 for OS drives 4 drive RAID5 for content drives	2 drive RAID1 for OS drives 4 drive RAID5 for content drives
CPU	(1) 3 GHz dual core	(2) 3 GHz dual core
RAM	1 GB DDR RAM	2 GB DDR RAM
CDROM	24X IDE CD-ROM	24X IDE CD-ROM
Chassis	2U	2U
Power supply	Redundant	Redundant
Operating System	Windows Server 2003 Web Edition or Standard Edition	Windows Server 2003 Web Edition or Standard Edition

Table 2. Recommended Drive Configuration

NVR Type	**Recommended Configuration**

NVR – 10 Licenses	• 73GB, SAS, 3.5-inch 10K RPM hard drive
	• 73GB, SAS, 3.5-inch 10K RPM hard drive
	• 146GB, SAS, 3.5-inch 10K RPM hard drive
	• 146GB, SAS, 3.5-inch 10K RPM hard drive
	• 146GB, SAS, 3.5-inch 10K RPM hard drive
	• 146GB, SAS, 3.5-inch 10K RPM hard drive
NVR – 40 Licenses	• 146GB, SAS, 3.5-inch 10K RPM hard drive
	• 146GB, SAS, 3.5-inch 10K RPM hard drive
	• 300GB, SAS, 3.5-inch 10K RPM hard drive
	• 300GB, SAS, 3.5-inch 10K RPM hard drive
	• 300GB, SAS, 3.5-inch 10K RPM hard drive
	• 300GB, SAS, 3.5-inch 10K RPM hard drive

Caveats

This section addresses known issues in this release, most of which have an easy workaround. For more information about any item, or help with an issue not listed here, contact your reseller or VBrick Customer Service.

- • When recording to an NVR from an MPEG-1/MPEG-2 encoder, and you stop the recording before it reaches 1% of the Defined Record Duration, the FTP will fail with an error message on the Status page. The NVR does not recognize extremely small files and this is standard behavior.

- • The NVR 40 lets you record any combination of up to 40 MPEG-1, MPEG-2, MPEG-4, and WM streams at a time. There are however performance limitations when recording multiple high-rate MPEG-2 or WM streams at the same time. At MPEG-2 rates up to 5.5MBps or WM rates up to 1.2MBps 40 simultaneous recordings are fully supported. At higher rates however the full licensing capacity cannot be used. For example, when using the **Best Quality** WM template at 4.5MBps, 10 simultaneous records are supported; when using MPEG-2 at 15MBps, 15 simultaneous recordings are supported.

- • Batch recording to an NVR from a WM VBrick encoder is not supported; the **Batch** tab is greyed out on the **Scheduling** page. Batch recording is supported from all other VBrick encoders.

- • The Portal Server and the NVR are tightly linked. In order to avoid backward compatibility issues, always upgrade the NVR from the same package when you upgrade the Portal Server, and vice versa.

- • In some cases, because of a naming resolution issue, a LAN Network Video Recorder (NVR) does not record when the ETV Portal Server server is in a DMZ. As shown on the status page, the recording will either fail or run indefinitely (without actually recording). To work around this issue, modify (or create) a `hosts` file on the ETV Portal Server as shown below. Go to `c:\windows\system32\drivers\etc\hosts`. Open the `hosts` file in an editor and add the IP address and computer name of the NVR as shown below. (If the `hosts` file is not present, you must create one by saving a `txt` file with no extension.)

```
# Copyright (c) 1993-1999 Microsoft Corp.
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
```

```
# The IP address and the host name should be separated by at least one
# space. Additionally, comments (such as these) may be inserted on
# individual lines or following the machine name denoted by a '#' symbol.
# For example:
# 102.54.94.97     rhino.acme.com # source server
# 38.25.63.10      x.acme.com     # x client host

127.0.0.1          localhost
nvr ip address     nvr computer name
```

- The ETV Portal Server and the NVR must be in the same time zone. Also, in order to record successfully, the system time on ETV Portal server and the NVR must be synchronized. You can synchronize the machines, for example, by running the Service for Windows Time on both machines. See "Synchronizing the Portal Server and the NVR" in the *Portal Server Admin Guide.*

- In order to record multiple streams, the Recorder path must be under FTP root. For example, if root is C:\Inetpub\ftproot the Recorder path must be C:\Inetpub\ftproot\<your_folder>

- If you try to uninstall the Microsoft .NET 1.1 framework prior to uninstalling the Network Video Recorder, the uninstall of the Microsoft .NET 1.1 framework will fail because the Network Video Recorder uses this framework. If you need to uninstall the Microsoft .NET 1.1 Framework, you first need to uninstall the Network Video Recorder software.

- The default FTP path in IIS is automatically set via the installer, but, depending on the particular machine's configuration, it may need to be changed. The installer sets the default FTP path to D:\Inetpub\ftproot in IIS, if a D: drive is detected. Otherwise it sets the path to C:\Inetpub\ftproot. If you have a machine with an E: drive and you want to set the FTP path to E:, you need to do two things. First, go to IIS and use the right mouse button to select on the **Default FTP Site**, select Properties from the popup menu. The Default FTP Site Properties dialog box will appear. Select the **Home Directory** tab. In the Local Path edit box, change the value to E:\Inetpub\ftproot and hit **OK**. Second, you need to go to the **Admin Console > Global Settings > Global Assignments** and change **Select FTP root path** to E:\inetpub\ftproot and then change **Select a media storage path** to E:\inetpub\ftproot\MCS\Record.

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